

**Industry:**

Energy from waste, Biomass, Biogas AD.

**Challenge:**

When maximum extraction of 'Renewable Energy' from a mixture of glass, stone, plastic and Bio-waste is required, the machinery that macerates this medium to a fine slurry, naturally has a high wear factor from impact and abrasion damage. In his particular instance, after a short period of time the medium would puncture the casing of the macerator.



**Solution:**

In line with the philosophy of 'Renewables' Corroserve repaired and renewed the macerator to provide for an extended life cycle by pre blasting the internals to ISO 8501-1 Sa2½ with a substrate profile of 50 microns. The application of **Plasmet HTE** to a DFT of 2000 microns and a veil coat of **Plasmet T** in black, to act as a 'wear indicator' for future inspections. **Plasmet HTE** is an amalgam of our ECR glass flake, stainless steel flake and silicon Carbide encased in a chemically bespoke resin. Together they provide industry leading levels of protection and longevity to plant and machinery processing abrasive and aggressive mediums.

**Results and benefits:**

The macerator was transformed from 'potential scrap' to 'better than new' having been re-engineered and internally coated. The environmental impact and carbon footprint of a 'renewed' asset is a fraction of a newly manufactured unit. The cost of the Corroserve process was less than 20% of the cost of a replacement macerator. The new life cycle was monitored by scheduled inspections and after 9 months continuous service the wear was only to the veil coat with the base coat of the **Plasmat HTE** still intact.



**Credentials:**

**Corroserve** has the experience and expertise to either coat from new or provide remedial coatings to chemical mix tanks. The bespoke coating systems used are determined by the operating conditions and mediums. Our coatings systems have provided unrivalled levels of corrosion in the harshest environments for over 40 years.

**Corroserve** is a member of **Corrosioneering Group** which also includes specialist paints and coating manufacturer – **Corrocoat** and research and development division – **Corrolabs**. Working together, we provide the ultimate 'one-stop-shop' for our customers.